

PRELIMINARY ASSESSMENT

Columbus Auto Parts**DATE:** 15, May 1994**OHIO ID #:** 125-1461**USEPA #:** OHD004286381

Address: 575 Hudson Street
Columbus, Ohio 43216
Franklin County

Coordinates: Lat. N40⁰ 00' 45", Long. 82⁰ 29 ' 43"

Owners: *Undetermined*

The ownership and status of the facility was under litigation in Federal Court as of March 5, 1994.

Operator: (defunct) Columbus Auto Parts
3941 Research Park Drive
Ann Arbor, Michigan 48109

Telephone #: none

Site Location:

Columbus Auto Parts (CAP) is situated on Hudson Street in Columbus. The site is accessible via the 112 interchange of Interstate 71 and can be located on the USGS 7.5' Northeastern Columbus, Ohio Quadrangle (116NW) (Map 1). The facility consists of a fully fenced 32 acre industrial site with many large structures (Map 2). The site is bordered by a Conrail Railroad easement to the west, Hudson Street and Johnson Controls to the north, Interstate 71 to the east and the Ohio Historical Society to the south. CAP is established in a densely populated area that is punctuated with commercial/industrial complexes along the Conrail Railroad tracks.

Site History:

Records show that CAP had been owned by the Klages family from 1912 until it was sold to LaRizza Industries in 1987. Continuous operations had been conducted at the Hudson Street facility from 1912 through 1988. The company produced metal front end components for the auto industry by the use of forging and machining processes.

- 1973 - OEPA issued initial operation air permits for oil fired boilers, nitride and heat treatment furnaces, electric salt baths, wheelabrator tumblasts and stand grinders.
- 1977 - March - OEPA approved the plans for an Industrial Waste Water Treatment Facility in the form of a closed circuit cooling system for the forge shop at the CAP facility.
 - August - OEPA's District Engineer approved the closed circuit cooling system at the CAP facility.
- 1978 - An Initial Pollution Incident Report 7804-25-0649 was filed in reference to the improper disposal of machine and #2 fuel oil in the sewer.

- 1980 - CAP filled a Notification of Hazardous Waste Activity on August 18.
- 1987 - Tricil agreed to treat and dispose of CAP's waste naptha-cutting oil. Electra-Bora Inc. acted as the waste transporter.
- 1988 - January 21 - An OEPA Division of Solid and Hazardous Waste Management (DSHWM) inspection determined that CAP produced methylene chloride, tetrachloroethylene and naphtha as hazardous waste and possibly Extraction Procedure Toxicity (EP Tox) Characteristic oils. During the inspection it was observed that CAP conducted a very sloppy operation -- there was significant oil contamination around the drum storage area (DSHWM Inspection Report, January 1988).
 - February - OEPA DSHWM informed CAP of the violations that were observed during the January inspection and gave 30 days for the facility to come into compliance.
 - On March 28, TECON conducted a hazardous waste audit at the CAP Hudson Street facility by reviewing and evaluating the processes of waste generation and management in each production area. As a result of their audit, TECON concluded the CAP facility did not generate any significant quantities of hazardous waste.
 - June - OEPA determined that CAP was no longer classified as a hazardous waste generator based upon a review of information submitted by CAP.
 - In late December, CAP closed down production at its Hudson Street facility and moved operations to Michigan.
- 1992 - On March 9, a site visit was conducted by OEPA Division of Hazardous Waste Management/Division of Solid and Infectious Waste Management (DHWM/DSIWM) personnel. No access to the facility was gained, however, upon walking the fenced perimeter of the property, personnel photographed more than 20 drums and observed extensive contamination.
 - In May, Burgess and Niple Engineers, Architects performed a Phase II Environmental Assessment of the CAP's Hudson Street facility at the request of the BayBank Middlesex of Burlington Massachusetts, which holds a principal mortgage on the property.
- 1994 - On January 7, OEPA Special Investigation Unit (SIU) personnel visited the site, upon the report that buried drums were on-site. Upon entering the facility SIU personnel walked through various standing structures and photographed drums throughout the property.

Geology/Hydrogeology:

The facility is located in the glaciated section of the Central Lowlands Region of Ohio. The local bedrock (Ohio and Olentangy Shale) is a carbonaceous shale that grades to a soft clayey shale. It is not a dependable source of water and generally

yields less than 2 gallons per minute. The average depth to bedrock on the site is between 6 to more than 15 feet (Map 3) (State of Ohio Department of Natural Resources, Division of Water, 1958).

Bedrock is overlain by Wisconsin age ground moraine, which varies in thickness from 6 to 20 feet. The ground moraine is considered a meager source of water, however, small water supplies are sometimes developed in the thin lenses of sand and gravel that are interbedded in the basal till (Map 4) (State of Ohio Department of Natural Resources, Division of Water, 1958).

The soils that cover the surface of the glacial deposits are the (BfA) Bennington-Urban land complex of the Bennington-Pewamo Association. These deep, poorly drained soils (permeability between 0.06 and 2.0 in/hr) are formed in limy, medium and moderately textured upland glacial tills (Map 5) (United States Department of Agriculture, Soil Conservation Service et al., 1980).

The average depth to the water table is 4 feet, but depth fluctuates with climatic changes. Shallow depth to water on the site is due to the perching effect of clay lenses that are found throughout the till. Deep groundwater flow in the area is generally to the east/southeast (Map 6a), while the perched groundwater on site flows to the east (Map 6b) (State of Ohio Department of Natural Resources, Division of Water, 1958 and Burgess and Niple Engineers, Architects., May 1992).

Waste Characteristics:

In 1992, BayBank Middlesex of Burlington Massachusetts contracted Burgess and Niple to perform a Phase II Environmental Assessment of the CAP's Hudson Street facility in an effort to define the extent of any contamination. Twelve soil samples were collected from auger borings. Six water samples and groundwater level data were collected from the 9 monitoring wells and 11 piezometers, which were also installed during the investigation.

As a result of the Assessment, three principal areas of oil, volatile organic compound (VOC) and polynuclear aromatic hydrocarbon (PAH) contamination were determined: the Oil Pit area, the Loading Dock and the areas between and to the west of Buildings 1 and 2 (including the Shed and underground storage tank (UST) area). All of the facility's buildings contained asbestos. VOC, PAH and oil contamination was found in the soil throughout the areas demarcated on Map 8. The only identified source of polychlorinated biphenyl (PCB) contamination was found in the structure known as the Shed. The sample collected from the Shed yielded 180 ppm of PCBs, but no VOCs or SVOCs were tested for at that site.

Summary of existing sampling and analytical data:

Eight asbestos samples were collected from the buildings of the facility. Five of the eight had positive results. Five PCB samples were collected from various locations throughout the facility and yielded one sample with 180 parts per million (ppm), while the remainder were non-detect. Twelve soil samples, six water samples and groundwater level data were collected throughout

the site and analyzed by Burgess and Niple Engineers' Laboratory.

All soil samples, were analyzed for barium, cadmium, chromium, lead, pH, total petroleum hydrocarbons (TPH), VOCs, PAHs, bis(2-ethylhexyl)phthalate and acid compounds. Of the twelve soil samples collected, nine were from the UST area, two from the loading dock area and one background (Map 8). The soil samples from the UST area tested positive for: barium, lead, VOCs, PAH's, methylene chloride, xylenes, tetrachloroethene and chlorobenzene, in varying degrees. The background soil sample was collected in the northeastern corner of the property, between the facility and Interstate 71.

Groundwater samples were collected from Piezometer 4 and Monitoring Wells 1, 7, 7D, 8 and 9. All of the groundwater samples, except MW-1, were analyzed for barium, cadmium, chromium, lead, pH, total petroleum hydrocarbons (TPH), VOCs, PAHs, bis(2-ethylhexyl)phthalate and acid compounds. The MW-1 and Piezometer 4 sample yielded positive results with bis(2-ethylhexyl)phthalate.

Sampling and analytical data are summarized in Map 7, Map 8, Table 1 and Table 2 (Burgess and Niple Engineers, Architects., 1992).

Probable Receptors:

The CAP facility is located on a topographic high with a perched water table that occurs within the zones of soil contamination. This condition presents a good potential for groundwater contamination to occur on site and ultimately migrate down gradient towards the private residences and the Ohio Historical Society.

The site is also located in a densely populated area. Although the currently abandoned property is fully fenced, it is particularly attractive to juveniles and trespassers. Multiple incidence of vandalism and arson may have exposed the trespassers to on site contaminants.

Surface Water Pathways:

Early in 1977, CAP brought on-line an approved waste water treatment plant. The treatment plant was designed to treat and discharge water from the forge shop's non-contact cooling water system directly into the Columbus City Sewer system. During the time of operation, the only discharge violation was related to the improper disposal of machine and #2 fuel oil in the sewer and not the treatment plant.

The current surface water pathway is limited to run off. The CAP facility occupies a topographic high in relation to most of the surrounding area. Subsequently, most of CAP's surface run-off discharges into the local storm sewers and onto the lower lying private residences and the properties of the Ohio Historical Society.

Groundwater Pathways:

The infiltration of surface waters, that have come in contact with contaminated soil, present a potential threat to the quality

of the groundwater, which passes beneath the CAP facility. Groundwater sample results from Monitoring Wells #7, 7D and 8 show low levels of TPH (6.0, 4.9 and 3.7 ppm respectively). Low concentrations of TPH indicate that contaminants may have begun to migrate from the soils into the groundwater.

The CAP facility was known to use an on-site production well to provide cooling water. The condition of the well is unknown, but its presence indicates an elevated possibility for the introduction of surface contaminants into the groundwater. According to well logs from the Department of Natural Resources, there are several industrial/commercial production and monitoring wells that lie within a 2 mile radius of the facility. These wells are potential receptors and could facilitate the spread of CAP related contamination to groundwater in the area.

CAP management expressed the intent to have the several USTs removed in 1987. The ultimate fate and condition of the USTs are unknown (response from the Bureau of Underground Storage Tank Removal, March 1994). The tanks were used to store oil and gasoline and were located to the west between Buildings 1 and 2. The presence of USTs could pose a serious threat to groundwater quality depending upon their condition.

The nature and condition of two large open waste oil pits, which were located on the west side of Building 2, are also unknown, and may be a source of environmental contamination.

Soil Pathways:

Soil samples from the CAP facility have documented oil, VOC, PAH and PCB contamination. Samples were collected for analysis from 2 to 8 feet in depth. Contamination found in the boring samples extend beyond the unsaturated and into the saturated zone. This condition presents the opportunity for soil contaminants to migrate into the groundwater and compromise water quality.

The facility is fully fenced, however, trespassers have not been deterred from gaining access to the property. Individuals trespassing on the site run the risk of exposure to VOCs, PAHs and PCBs that are present in the soils.

Air Pathways:

CAP has been closed since 1988 and holds no current air permits. During operations the facility held permits for oil fired boilers, nitride and heat treatment furnaces, electric salt baths, wheelabrator tumblasts and stand grinders with no serious air violations.

There is no air exposure threat that extends beyond the confines of the property at this time. However, site visitors run the risk of exposure to asbestos in the buildings and various volatile organic vapors that may emanate from contaminated soils.

Recommendations:

The Columbus Auto Parts facility has been identified as being contaminated with oil, VOCs, PAHs and PCBs. It is possible that buried drums and USTs are on the property.

Because the facility is located in a densely populated area and on a topographic high, which has a perched water table, there is a potential for groundwater contamination and human exposure to occur. Until the contamination is abated, the threat to human health and the environment will continue. It is, therefore, recommended that the Columbus Auto Parts facility on Hudson Street receive a medium priority designation for State action.

References:

Ohio Environmental Protection Agency, Division of Air Pollution Control, files.

Ohio Environmental Protection Agency, Division of Surface Water, files.

Ohio Environmental Protection Agency, Division of Hazardous Waste Management, files.

TECON Inc.. March 1988, Columbus Auto Parts RCRA Audit.

Ohio Environmental Protection Agency, Site Investigation Unit, files.

Burgess and Niple Engineers, Architects. May 1992, Phase II Environmental Assessment - Part 2., Columbus Auto Parts Site., Columbus, Ohio.

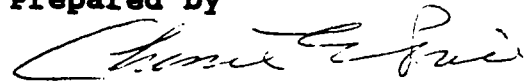
State of Ohio Department of Natural Resources, Division of Water. 1958, Groundwater Resources of Franklin County, Bulletin 30.

United States Department of Agriculture, Soil Conservation Service et al. 1980, Soil Survey of Franklin County, Ohio.

Ohio Department of Natural Resources., Well Logs.

Bureau of Underground Storage Tanks response to OEPA. March, 1994.

Prepared by



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Central District Office

Reviewed by



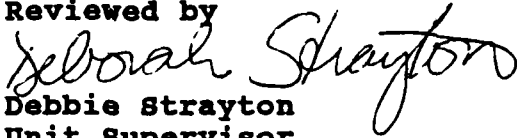
Manny Ayeni

Group Leader

Division of Emergency and Remedial Response

Central District Office

Reviewed by

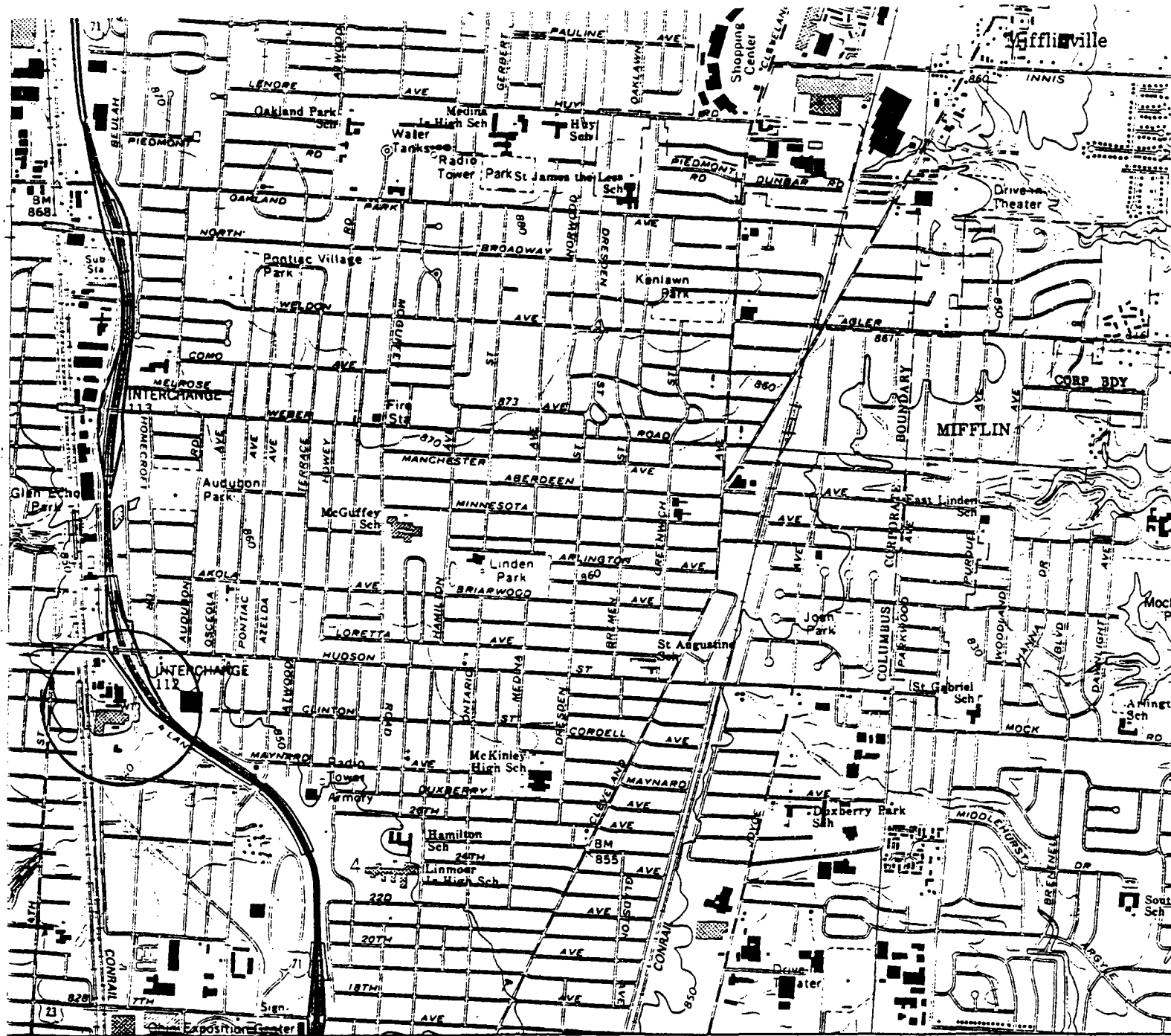


Debbie Strayton

Unit Supervisor

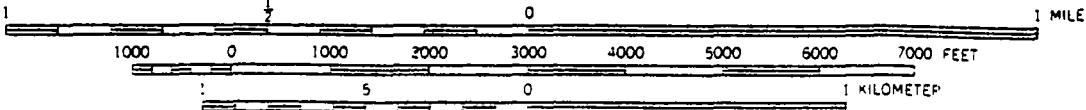
Division of Emergency and Remedial Response

Central District Office

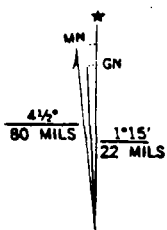


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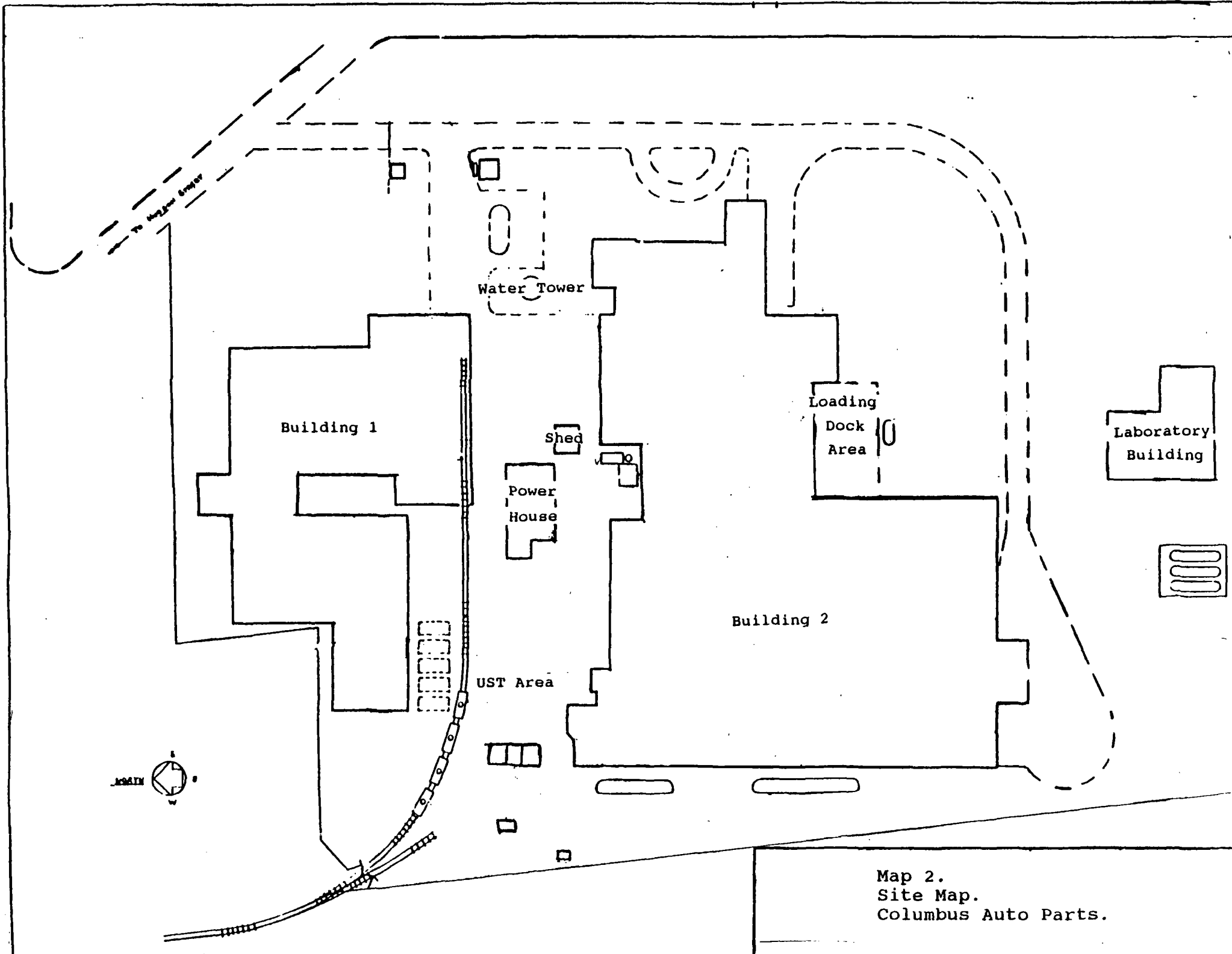
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CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929



Map 1.
Location Map.
Columbus Auto Parts.
USGS 7.5' 116NE.
Northeastern Columbus, Ohio.





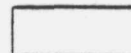
EXPLANATION



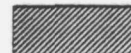
LOWER CUYAHOGA FORMATION
Series of alternating layers of sandy shale and sandstone. Ample water supplies are available for farm, domestic, and small industrial use. Potential yields of as much as 30 gpm may be expected from the sandstone layers.



SUNBURY SHALE
This argillaceous shale is not considered to be a reliable source of ground water.



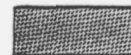
BEREA SANDSTONE
Thin to massively bedded sandstone ranging from 5 to 55 feet thick. Yields of as much as 25 gpm may be developed in Blendon, Plain, and Jefferson Townships.



BEDFORD SHALE
Soft argillaceous shale 50 to 90 feet thick. Very poor source of ground water in Franklin County.



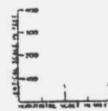
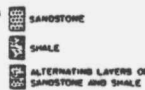
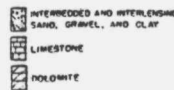
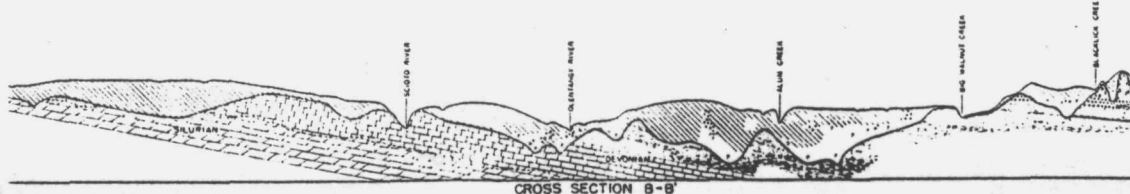
OHIO AND/OR OLENTANGY SHALE
Carbonaceous shale grading to soft clayey shale. Not a dependable source of ground water in the county. Generally yields less than 2 gpm.



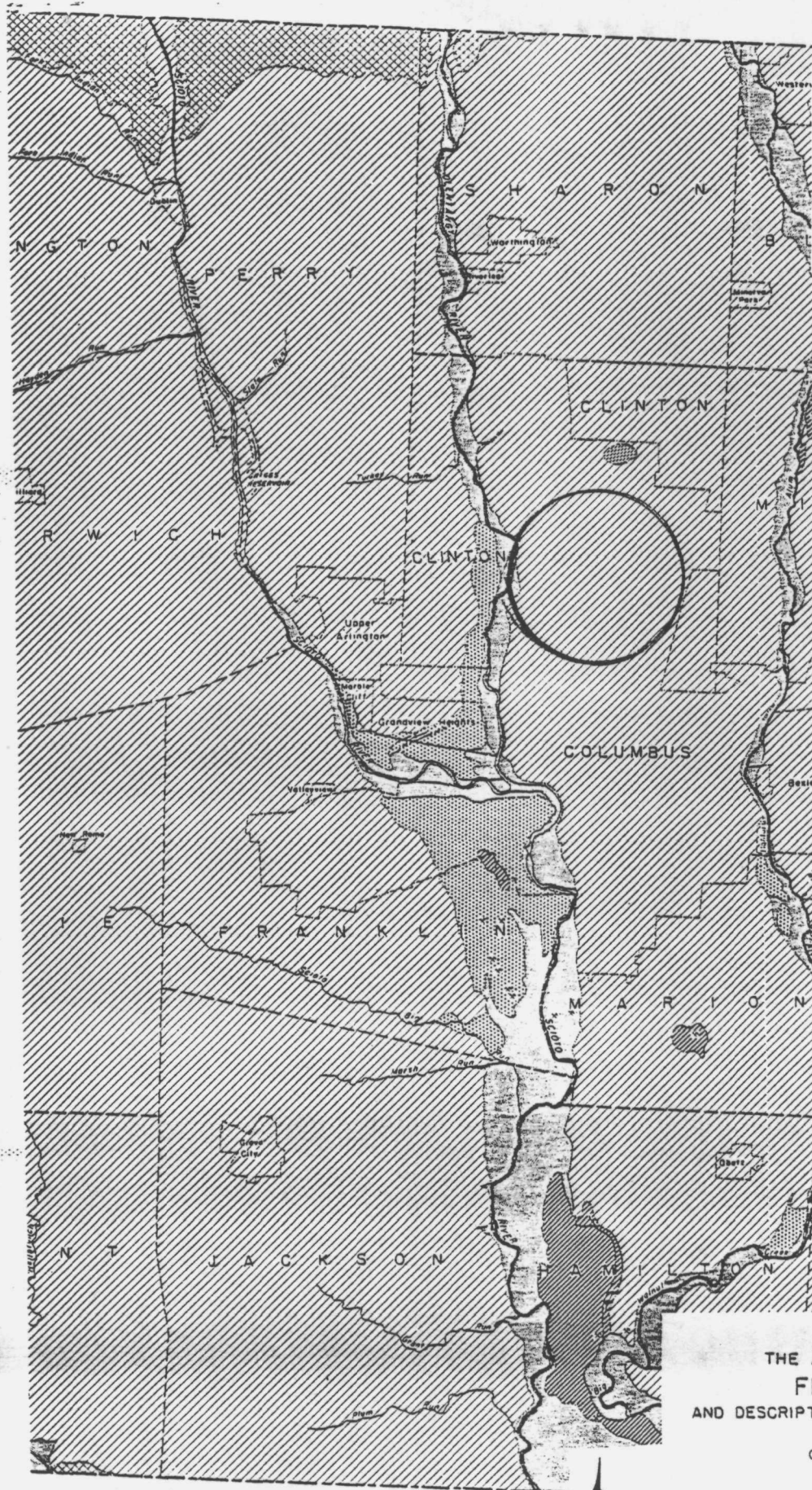
DELAWARE AND/OR COLUMBUS LIMESTONE
The Delaware formation is a thin to massively bedded dense limestone, with some thin shaly layers. Yields of less than 3 gpm may be expected. The Columbus limestone is the principal aquifer in the western half of Franklin County. Industrial supplies may be developed, however, relatively high hardness, dissolved solids, and hydrogen sulfide may be characteristic of water from deep wells.



BASS ISLANDS DOLOMITE
The Bass Islands dolomite is exposed in Pleasant Township and crops out beneath thick glacial fill in the buried valleys of western Franklin County. It is the most important bedrock aquifer in the county and has a potential yield of up to 400 gallons a minute. As with other limestone aquifers in the county, the degree of mineralization increases with depth.



Map 3.
Columbus Auto Parts.
Bedrock Map and X-Section.



EXPLANATION



ALLUVIAL DEPOSITS

Silt and gravel deposited by the present streams on their flood plains. Because these deposits are thin and generally impermeable, they are not a source of ground water. Wells that penetrate these deposits may encounter valley-train deposits, and yield large ground-water supplies.



VALLEY-TRAIN DEPOSITS

Outwash deposits of sand and gravel deposited in the valleys by flooding meltwater from the glacier. These deposits occur above present drainage as gravel terraces and generally do not receive infiltration from major streams. These deposits are very permeable and increase the recharge potential for the underlying formations, which usually consist of valley-train deposits below drainage.



KAMES AND ESKERS

Sand and gravel deposited as hills and ridges. Some of these are covered with thin till or contain till masses. Quantity of water obtainable depends upon the thickness of the material and amount of recharge.



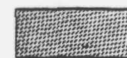
END MORAINE

Generally till, in places stony or sandy, with interbedded sand and gravel lenses. Deposited as hills and ridges at the edge of the glacier. Small farm and domestic water supplies are generally developed from wells in the lenses of sand and gravel.



GROUND MORAINE

Till generally more than 20 feet thick, although bedrock may be exposed in a few places. Meager water supplies in the till, but adequate supplies for farm and domestic use are sometimes developed in the thin lenses of sand and gravel interbedded in the till.



LAKE BEDS

Clay and silt which settled in small lakes near the melting ice edge. These deposits range from 10 to 20 feet thick and are not a source of ground water.



Drainage Channels



Gravel Pit

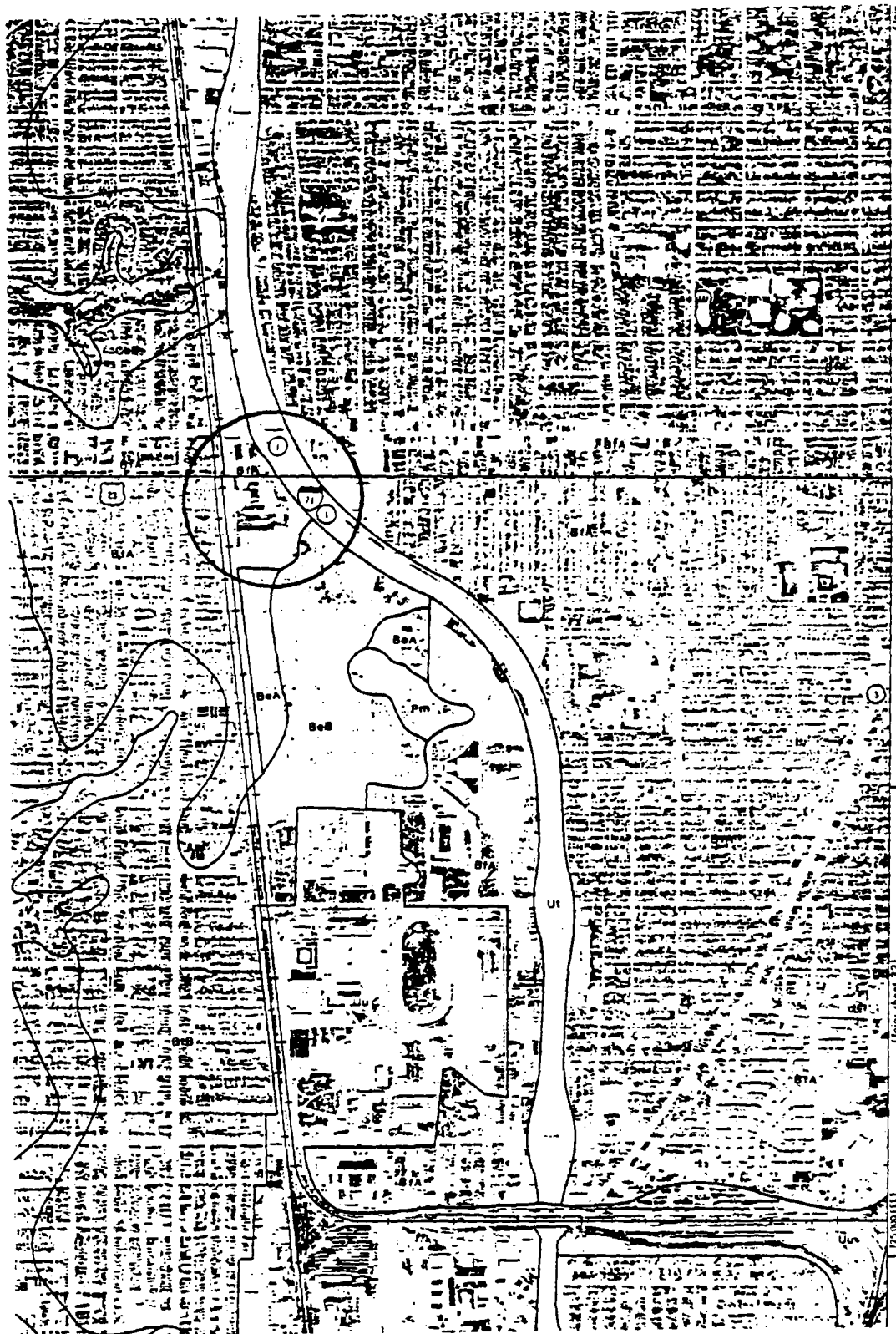
MAP OF

THE ALLUVIAL AND GLACIAL DEPOSITS OF FRANKLIN COUNTY, OHIO AND DESCRIPTION OF THEIR WATER-BEARING PROPERTIES

GEOLOGY BY RICHARD P. GOLDTHWAIT

SCALE IN MILES

Map 4.
Columbus Auto Parts.
Alluvial and Glacial Deposits.



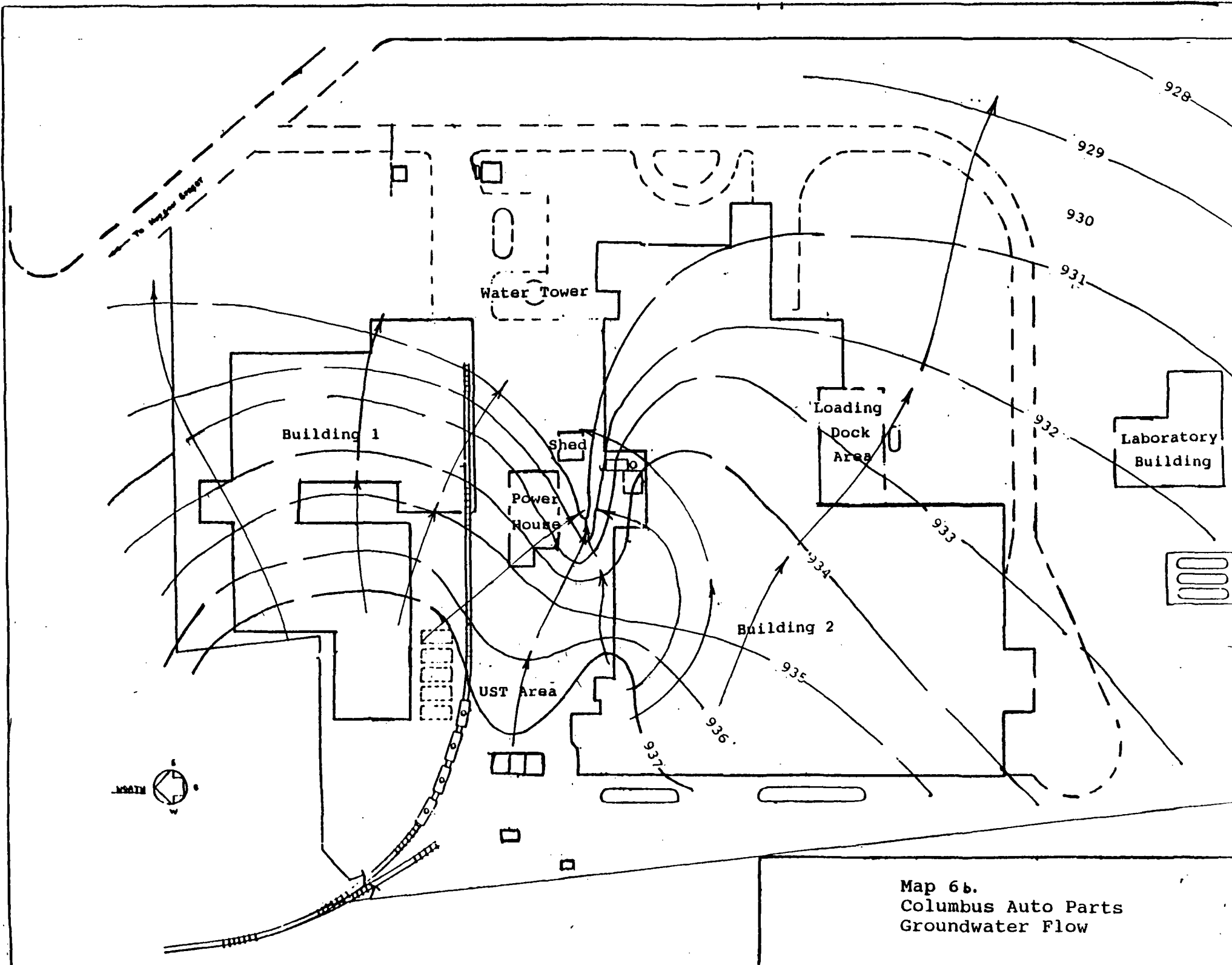
Map 5.
Columbus Auto Parts.
Soils Map.

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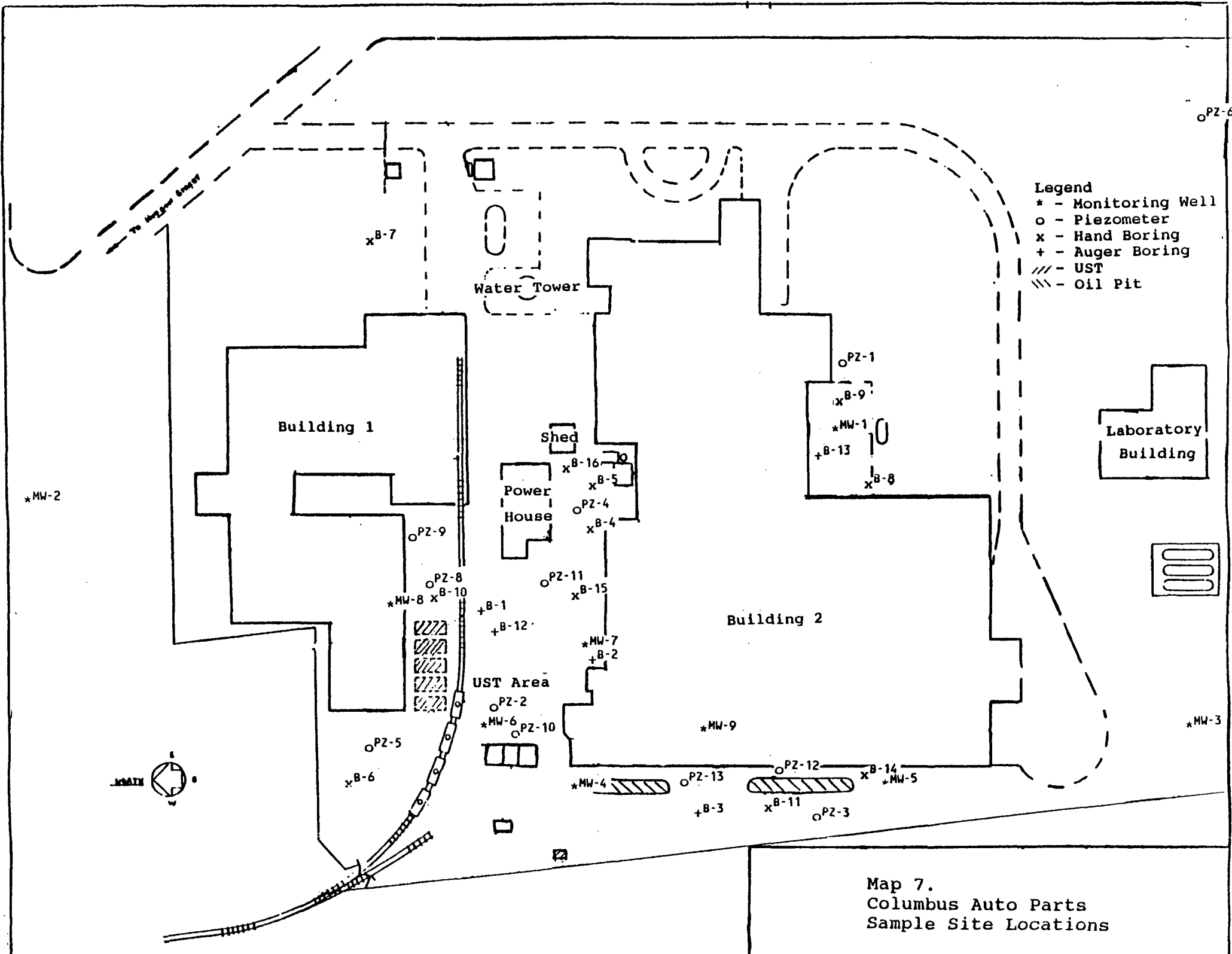


Map 6a.
Columbus Auto Parts.
General Groundwater Flow.

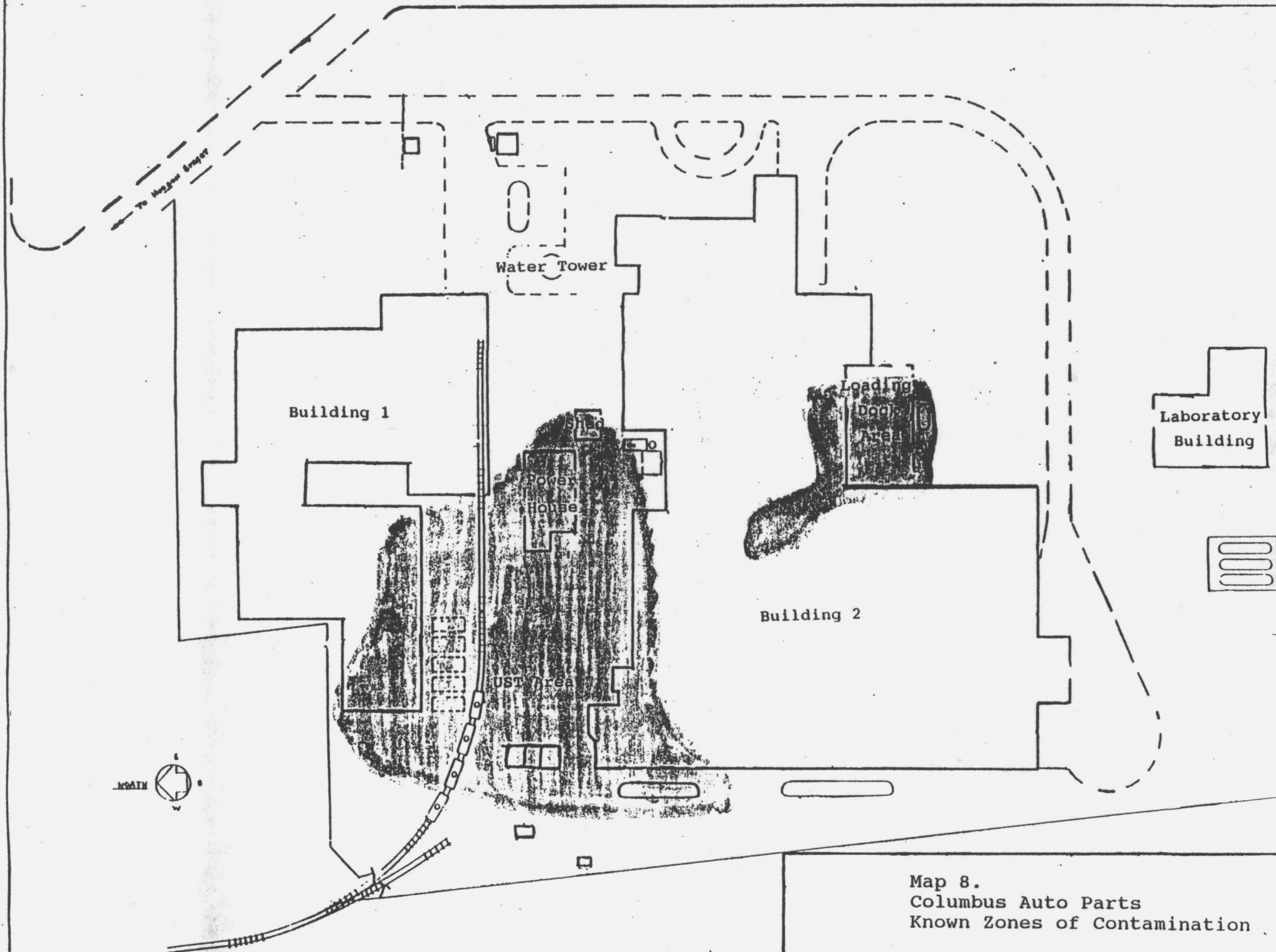




Map 6b.
Columbus Auto Parts
Groundwater Flow



Map 7.
Columbus Auto Parts
Sample Site Locations



Map 8.
Columbus Auto Parts
Known Zones of Contamination

Table 1.
Groundwater Sampling Results
March 31, 1992
Former Columbus Auto Parts Site
Columbus, Ohio

<u>Parameter</u>	<u>Units</u>	<u>MW-1</u>	<u>MW-7</u>	<u>MW-7D</u>	<u>MW-8</u>	<u>MW-9</u>	<u>PZ-4</u>
Barium	ug/l	NA	390	370	340	130	<100
Cadmium	ug/l	NA	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	ug/l	NA	<2.0	<2.0	<2.0	<2.0	<2.0
Lead	ug/l	NA	<2.0	<2.0	<2.0	<2.0	<2.0
pH	S.U.	NA	6.9	6.9	7.1	6.9	7.0
TPH	mg/l	NA	6.0	4.9	3.7	<1.0	<1.0
Volatile Compounds, SW8240	ug/l	NA	ND	ND	ND	ND	(a)
Base/Neutral Compounds SW8270	ug/l	—	ND	ND	NA	NA	NA
Bis (2-Ethylhexyl) Phthalate	ug/l	54	ND	ND	NA	NA	23
Acid Compounds SW8270	ug/l	ND	ND	ND	NA	NA	ND

(a) Sample contains 1,3-Propanediol, 2,2-Dimethyl-, CAS No. 126307, at an estimated concentration of 1,100 ug/l. No other VOCs were detected.

ND = None Detected.

NA = Not Analyzed.

Table 2 (Continued).

	Units	<u>Paint Storage Area</u>		<u>Loading Dock Area</u>		<u>Background</u> <u>B-7</u>
		<u>B-15</u>	<u>B-16</u>	<u>B-13</u> <u>(2'-4')¹</u>	<u>B-13</u> <u>(6'-8')²</u>	
Barium	mg/kg	--	--	480	280	170
Lead	mg/kg	--	--	1,700	120	72
TPH	mg/kg	--	--	4,700	100	23
B-N Compounds SW8270						
Indeno (1,2,3-ZD)Pyrene	mg/kg	30		ND	ND	
Phenanthrene	mg/kg	100				
Pyrene	mg/kg	110	33			
Benzo(a)Anthracene	mg/kg	75				
Benzo(b)Fluoranthene	mg/kg	73				
Benzo(k)Fluoranthene	mg/kg	53	19			
Benzo(g,h,i)Perylene	mg/kg	28				
Benzo(a)Pyrene	mg/kg	58				
Chrysene	mg/kg	77				
Fluoranthene	mg/kg	120	37			
Acid Compounds SW8270		ND	ND	ND	ND	
Volatile Compounds SW8240		--	--			
Methylene Chloride	ug/kg			13	12	
Anthracene	mg/kg	30				

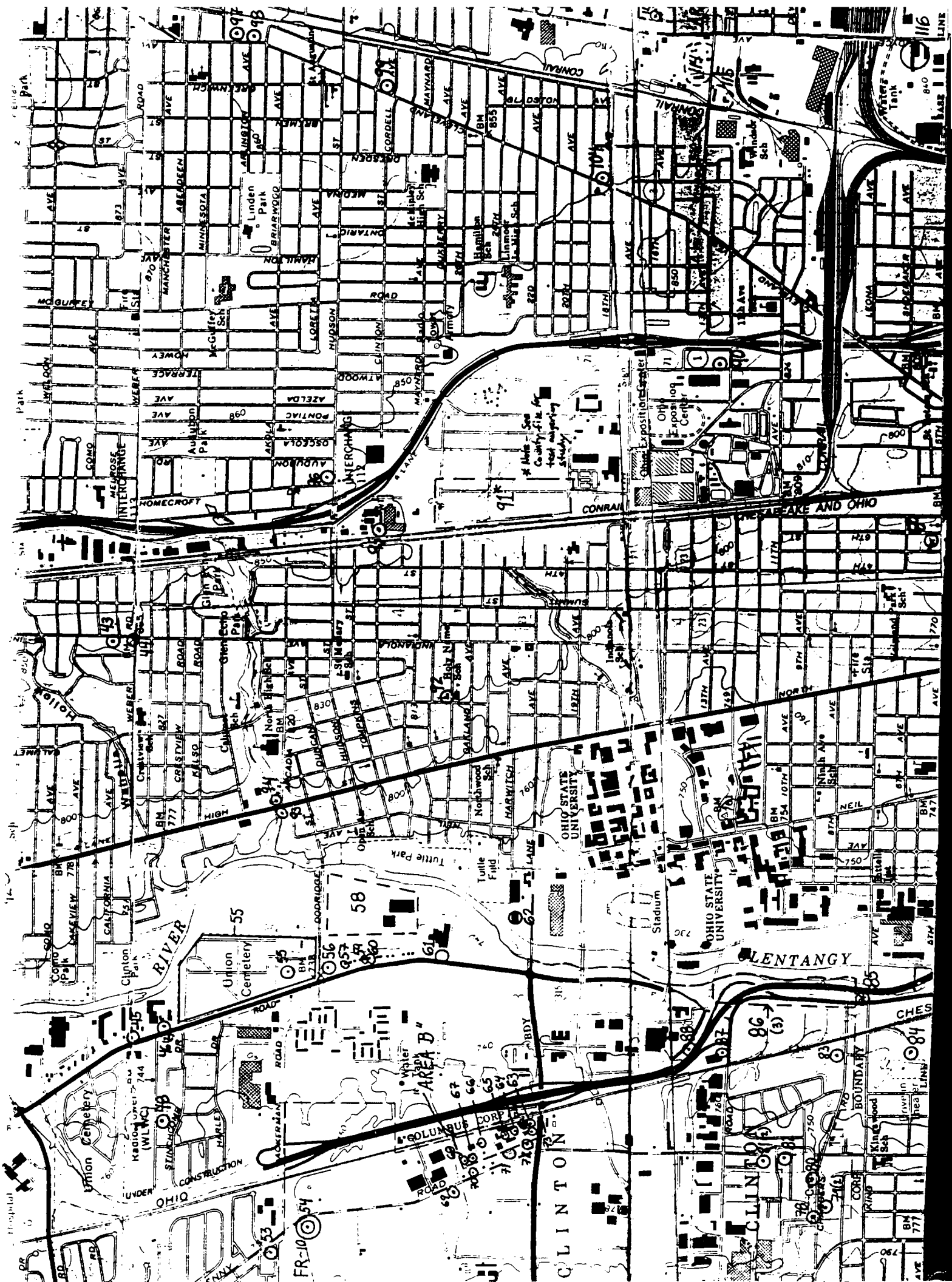
¹ Sample contains 1,3-Propanediol, 2,2-Dimethyl-, CAS No. 126307, at an estimated concentration of 70 ug/kg.

² Sample contains 1,3-Propanediol, 2,2-Dimethyl-, CAS No. 126307, at an estimated concentration of 30 ug/kg.

Table 2.

**Soil Sampling Results
3-23-92 Sampling Event
Former Columbus Auto Parts Site
Columbus, Ohio**

		UST Area						
	Units	MW-7 (6'-8')	MW-8 (6'-8')	MW-9 (2'-4')	B-12 (0'-2')	PZ-10 (6'-8')	PZ-12 (4'-6')	PZ-13 (4'-6')
Barium	mg/kg	97	320	84	130	68	400	110
Lead	mg/kg	14	11	16	16	18	13	25
TPH	mg/kg	870	910	18	3,600	420	17	30,000
Volatile Compounds, SW'8240		ND		ND	ND		ND	
Methylene Chloride	ug/kg		12					
Xylenes	ug/kg					24		90
Tetrachloroethene	ug/kg							16
Chlorobenzene	ug/kg		10					



WELL LOG AND DRILLING REPORT

ORIGINAL

PLEASE USE PENCIL
OR TYPEWRITER.
DO NOT USE INK.

State of Ohio
DEPARTMENT OF NATURAL RESOURCES
Division of Water
1562 W. First Avenue
Columbus, Ohio

No. 228244

County Franklin Township Clinton Section of Township _____
Owner Ohio Fuel Gas Co. Address 920 W. Goodale Blvd.
Location of property Indianna Ave + Weber Rd

CONSTRUCTION DETAILS

Casing diameter 8" Length of casing 8'
Type of screen - Length of screen -
Type of pump -
Capacity of pump -
Depth of pump setting -
Date of completion Jan 20, 1964

BAILING OR PUMPING TEST

Bail _____
Pumping rate 25 G.P.M. Duration of test 2 hrs.
Drawdown 20 ft. Date Jan 20, 1964
Developed capacity _____
Static level—depth to water 12 ft.
Pump installed by _____

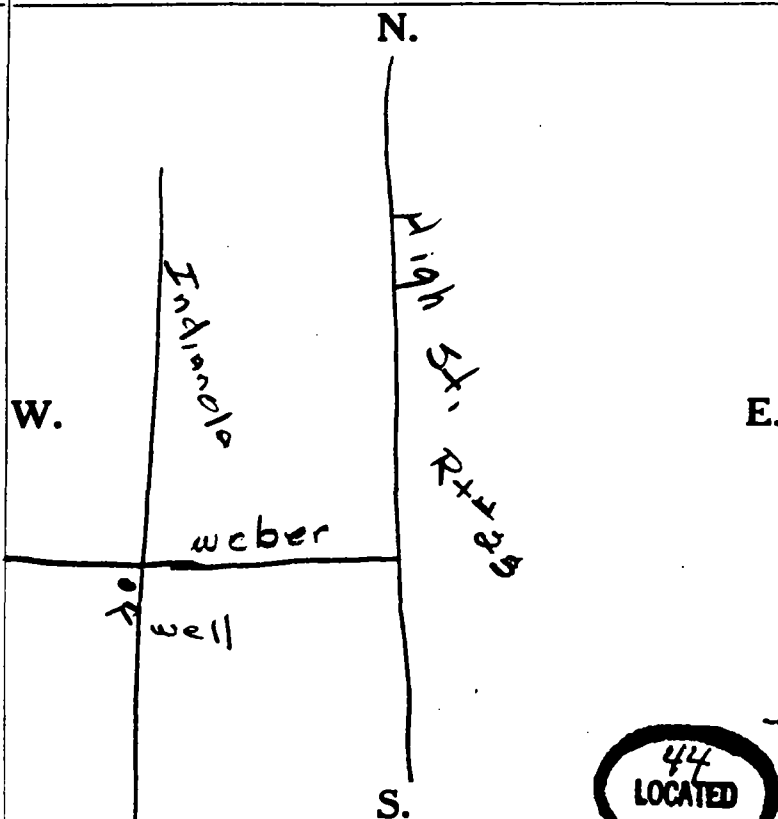
WELL LOG

Formations Sandstone, shale, limestone, gravel and clay	From	To
CLAY	0 Feet	8 Ft.
Black shale	8	36'
Blue shale	36'	68'
Black shale	68	116'
Blue shale	116'	146'
Black shale	146'	162'
Brown shale	162'	171'
Limestone	171'	

Well is for Electronic equipment
to clean Gas lines.

SKETCH SHOWING LOCATION

Locate in reference to numbered
State Highways, St. Intersections, County roads, etc.



See reverse side for instructions

Drilling Firm Johnson Drilling
Address 606 River View Dr.

Date Feb 11, 1964
Signed James Johnson

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER

Co. Franklin Twp. Clark Sec.
Columbus Auto Parts Co.
Owner Hudson Ave. and Penn. Tracks
Address Columbus Ohio
Well location

Construction Details	Pumping Test
Casing: Diam. <u>8 1/2</u> length <u>33+</u>	Rate: <u> </u>
Screen: <u> </u>	Hrs.: <u> </u>
Type of pump: <u> </u>	D.D. <u> </u>
Capacity: <u> </u>	S.L. <u> </u>
Depth of setting: <u> </u>	Date <u>20</u>

Owner's Well No.
Driller G. M. Baker and Son Inc.
Located by jjs Date
Remarks

Office No. 1884 jjs
Log form No. 83953
Quad Franklin

STRATA	Depth	
	From	To
Elevation <u> </u>		
Fill	0	10
Clay	10	15
Soft Shale <u>(6 1/4')</u>	15	33
Hard Shale	33	45
Soapstone	45	80
Shale	80	130
Soapstone	130	133

95
LOCATED

*Approximate Location

83
97

853
218
637

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER

Co. Franklin Twp. Clinton Sec.

Owner Linden Theater

Address 2436 Cleveland Ave.

Well location Columbus, Ohio

Construction Details	Pumping Test
Casing: Diam. <u> </u> length <u> </u>	Rate: <u> </u>
Screen: <u> </u>	Hrs: <u> </u>
Type of pump: <u> </u>	D. D. <u> </u>
Capacity: <u> </u>	S.L. <u> </u>
Depth of setting: <u> </u>	Date <u> </u>

Owner's Well No. # 37

Driller C.E. Records

Located by sen Date 1950

Remarks Chemical analysis on file.

Office No. 1175

Log form No.

Quad. Westerville

STRATA	Depth	
	From	To
Elevation <u>6-218-24</u>		
Clay	201	218
Hard ls? sh		221
Black sh?		229
Gray slate & mud	1/	300
Brown ls		320
Gray ls		350

97
LOCATED

44
98

M-15

010-182-

OHIO WATER SUPPLY BOARD

Well Record No. 116

Co. Franklin 25 Twp. 4 Sec.
Well Location east side of bldg. Size 6"
Young's Dairy, Cleveland Ave., Col. Map Westerville

Owner Young's Dairy Add non-responsive
Driller G. M. Baker Date 2-14-44

Well Head Elev. or M. P.
Elev. of Ground at Well

Pumping Test: ✓

Static Level 53' Date 2-14-44
Normal Pumpage

Quality Use

Adequacy of supply

Owner's Well No. or Other Designation

Source of Data Driller
Collected by RK Date 5-8-44

STRATA	DEPTH	
	From	To
Yellow clay	1	20
grey clay	20	31
grey clay and gravel	31	38
grey clay	38	65
sand and gravel	65	82 ¹ / ₂
clay	82 ¹ / ₂	---
(3)		
non-responsive		
98 LOCATED		

OHIO WATER SUPPLY BOARD

Well Record No. 122

Co. Franklin Twp. 4 Sec. 25
 Well Location Cleve Theatre Size 8"
1754 Cleve Ave. Map Westerville

Owner Cleve Theatre Address Col., Ohio
 Driller G. M. Baker Date 3-25-38

Well Head Elev. or M. P. _____
 Elev. of Ground at Well _____

Pumping Test: ✓

Static Level 67' Date 3-25-38
 Normal Pumpage _____

Quality _____ Use _____

Adequacy of supply _____

Owner's Well No. or Other Designation _____

Source of Data Driller
 Collected by RK Date 3-25-38

STRATA	DEPTH	
	From	To
mud and gravel		20
mud, gravel and boulders	20	45
mud, gravel, some sand	45	70
mud and gravel	70	112
gravel and water	112	124
clean gravel and sand	124	128
(3) $X = 1,866,900$ $Y = 122,600-N$		
104 LOCATED		

* Chief Aquifer

718614

Ohio Department of Natural Resources, Division of Water
1939 Fountain Square Drive, Columbus, Ohio 43224 Phone (614) 265-6739
Permit Number

LOCATION OF PROPERTY NE Corner of N High & Pacemont Intersection

CASING Borehole Diameter 6 in.

① Diameter 4 in. Length 4 ft. Wall Thickness .237 in. Material benonite, cement Volume used 2 feet

② Diameter _____ in. Length _____ ft. Wall Thickness _____ in. Method of installation tremie

Type: ① Steel ① Galv. ① PVC ① _____
 ② _____ ② _____ ② _____ ② Other _____

Joints: ① Threaded ① Welded ① Solvent ① _____
 ② _____ ② _____ ② _____ ② Other _____

Liner: Length _____ Type _____ Wall Thickness _____ in. Depth: placed from 2 ft. to surface ft.

SCREEN GRAVEL PACK (Filter Pack)
 Material quartz Volume used 700 lbs.
 Method of installation tremie
 Depth: placed from 2 ft. to 19 ft.

SCREEN Pitless Device ☐ Adapter ☐ Preassembled unit
 Use of Well monitor
☐ Rotary ☐ Cable ☒ Augered ☐ Driven ☐ Dug ☐ Other _____

Type (wire wrapped, louvered, etc.) slot Material PVC
 Length 15 ft. Diameter 4 in.
 Set between 4 ft. and 19 ft. Slot 10
 Date of Completion 10x19-90

MW # 2		
Black top, gravel	0	.5
Clay	.5	4
Sand and Clay	4	8
Fine Sand	8	12
Sand & Clay	12	14
Gray Clay	14	20

☐ Bailing ☐ Pumping* ☐ Other _____
 Test rate _____ gpm Duration of test _____ hrs.
 Drawdown _____ ft.
 Measured from: ☐ top of casing ☐ ground level ☐ Other _____
 Static Level (depth to water) _____ ft. Date: _____
 Quality (clear, cloudy, taste, odor) _____
 *(Attach a copy of the pumping test record, per section 1521.05, ORC)

Type of pump _____ Capacity _____ gpm
Pump set at _____ ft.
Pump installed by _____

Show distances well lies from numbered state highways, street intersections, county roads, etc.

N

W

E

DNR 7802.90

City, State, Zip Middletown, Ohio 45042 ODH Registration Number _____

Blue - Customer's copy Pink - Driller's copy Green - Local Health Dept. copy

~~87~~ 91

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER

Co. 25 Franklin Twp. 4 Franklin Sec.

Owner E. G. Halbachur
Address 2308 3C Highway
Well location Same

Construction Details	Pumping Test
Casing: Diam. <u>5 1/2</u> length <u>80</u>	Rate: <u>✓</u>
Screen: <u> </u>	Hrs: <u> </u>
Type of pump: <u> </u>	D. D. <u> </u>
Capacity: <u> </u>	S.L. <u>251</u>
Depth of setting: <u> </u>	Date <u> </u>

Owner's Well No.
Driller Lee Stipp
Located by jjs Date
Remarks

Office No. 1767 11s
Log form No. 81380
Quad. Franklin

STRATA	Depth	
	From	To
Elevation <u> </u>		
top clay	0	8
blue clay	8	35
sand gravel	35	45
blue clay	45	75
fine sand	75	80
water in gravel at 80'		
(3)		
$X = 1,841,900$ $Y = 699,900 - 5$		
99 LOCATED		

* Approximate Location

45-90

Hudson
Hercroft
M12
010-1205

OHIO WATER RESOURCES BOARD

Well Record No. 435

25 3
Co. Franklin Twp. Clinton Sec. 1
Well Location Hudson Bait Co. Size 5" x 21' 2"
Map Westerville
Owner Clyde W. McComan Address 686 Hudson St.
Driller R. V. Dillon and Son Date 6/2/48
Well Head Elev. or M. P.
Elev. of Ground at Well
Pumping Test: 7 GPM for 3 hrs; 32' DD
Static Level 18' Date 6/2/48
Normal Pumpage
Quality Use
Adequacy of supply
Owner's Well No. or Other Designation
Source of Data Driller
Collected by mt Date June 1948

28812 STRATA	DEPTH	
	From	To
Black silt	0	4
Yellow clay		15
Black shale		45
Green shale		69
Brown shale		95
Total depth 95' Crevice more water at 95' 5		

Type of pump: Cook $\frac{3}{4}$ hp jet. Capacity: 500 gph at 80' Depth of setting: 84'		
Z=1,863,100 Y=127,400-N		
96 LOCATED		

43

OHIO WATER SUPPLY BOARD

Well Record No. 139

25
Co. Franklin Twp. City of Cols. Sec.
Well Location 3075 Indianola Ave. Size 8"
Cols. Map Dublin
Owner Indianola Theater Address Columbus, Ohio
Driller G.M. Baker Date 11-26-37
Well Head Elev. or M. P.
Elev. of Ground at Well
Pumping Test: ☒
Static Level 153' Date 11-26-37
Normal Pumpage
Quality Use
Adequacy of supply
Owner's Well No. or Other Designation
Source of Data Driller
Collected by S. Norris Date 1942
5-5-44

STRATA	DEPTH	
	From	To
Dark Brown Shale		63
Dark Gray Shale		82
Blue Shale		110
Brown Shale		157
Soapstone		228
Dark Brown Limestone		244
Light Creamy Limestone		265
Gray Limestone (1)		286
X=1,859,250 Y=131,580-N		
43 LOCATED		

* Chief Aquifer